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**Merger and Acquisition in Retail Grocer Chains:
Monopoly - No, Monopsony - Maybe**

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Two years ago, the United States had no nationwide grocery chain. Now, it has at least three. Mergers and acquisitions among retail grocery chains since 1998 have been mega mergers. They have given Kroger, Albertsons, and Safeway grocery stores from coast to coast. Walmart, by building new stores and converting existing stores to supercenters has established itself as the second largest grocer in the U.S.¹ It operates all across the country, though its supercenters tend to be found in the southern half of the country. Depending on what types of sales are counted, Wal-Mart ranks the second, third or fifth largest supermarket chain in the U.S. (Table 1 and 2). It is expected to be number one by 2003 regardless of the measure (Urbanski, 2000).

The subject of these three papers is whether recent growth in the size of retail chains has significantly increased consolidation of retail food stores. The underlying, unstated, concern is that consolidated ownership of retail food stores will give monopoly power to a few large chains that will lead to higher food prices for consumers. All of the authors conclude that this is not the case. Growth in the size and market share of retail food chains over the past fifteen years has not significantly increased retail food concentration ratios nor has it constituted anticompetitive behavior. What makes this more interesting is that this conclusion is arrived at through three separate types of

¹The sales at Wal-Mart supercenters are about \$45 billion per year making it the second largest chain of stores selling food in the U.S.(Table 1) If only Wal-Mart's food sales are counted (\$16 billion in 1999) they rank 5th in food sales. If Wal-Mart's and Sam's Clubs food sales are added together, their sales are \$30 billion annually, putting them in 3rd place, ahead of Safeway. The latest data from *TradeDimensions* counts only the portion of all supercenter or hypermarket sales that would typically be found in a grocery store. (Table 2)

analysis. What makes this unified conclusion troublesome is that all of the analyses omit the most recent and biggest mergers and they all draw their inferences from secondary data already filtered by other data aggregators so if there is a bias in the original data design it will carry through to the results by all who analyze it. Although I tend to believe their collective findings, I have to question whether they will prove to be the truth five years from now.

Kaufman, uses the CR4 concentration ratio (the percent of sales captured by the top four retail food companies), and adjusts it for the size of the population since concentration tends to be lower in areas with large populations. The adjusted measure increases the CR4 ratio but makes it more realistic for comparing changes between large metropolitan areas and smaller communities. By this measure, he finds that the concentration ratio increased 4.1 percentage points (65.7 to 69.8) between 1992 and 1998 in the 100 largest Metropolitan Statistical Areas (MSAs). The data does not cover the last big acquisition by Kroger, but as he claims, that merger involved little overlapping territory and should not affect the CR4 ratio in the (MSAs) included in the data collected by Trade Dimensions and presented in Marketscope. The Marketscope data covers 62 percent of the retail food market in the country. Since it focuses on metropolitan areas, if one is concerned about the impact of mergers or growth on rural and smaller markets, this data is not helpful.

The distribution of change in concentration was skewed towards those MSAs that had the lowest concentration in 1992. For example, where the CR4 ratio was between twenty and thirty percent in 1992 the increase was almost thirty-two percentage points by 1998. Where the CR4 ratio was between forty and sixty in 1992 the increase was over 9 percentage points by 1998. In MSAs where concentration was highest in 1992 (over eighty percent) the CR4 ratio fell modestly as it did in those areas where the CR4 ratio was between thirty and forty percent. The overall change was an

increase of 3.3 percentage points when the data is unadjusted for population. This is not considered to be a significant increase.

In a complementary study, the impact of Wal-Mart's growth on concentration is examined by Franklin also using data from Marketscope. Wal-Mart's growth was prevalent in areas with smaller populations and where household incomes are less than national median. The longer Wal-Mart was in an area the larger their market share became. These findings are consistent with conventional wisdom, but Franklin demonstrated them with regression analysis. Interpreting his coefficients, it appears that as Wal-Mart is in a locality an additional year, its market share increases by 0.9. This is consistent with earlier work that shows that after Wal-Mart moves in, local stores tend to drop out. Oral Capps (1997) found that between 1987 and 1994, in rural communities around Dallas, Texas, the sales of thirty indigenous stores under one brand name, dropped by about 17 percent due to Wal-Mart's entry.

Even though Wal-Mart's growth did not change the overall CR4 ratio very much, it was a significant factor in twelve of the fifty-four MSAs where it entered or developed supercenters. In 8 of these twelve areas the CR4 ratio increased more than ten percentage points and in 4 areas it decreased more than ten points. On balance the CR4 ratio increased 3.5 percentage points in the fifty-four MSA's where Wal-Mart entered between 1993 and 1999. This is virtually the same as the overall change across the nation, in the largest MSA's, over that time period. (Table 3)

Kaufman calculated the actual and equal share Herfindahl-Hirschman Indexes (HHI) and the ratio of the two, but he fails to provide any interpretation of the findings. In an appendix, he states that a post merger HHI above eighteen hundred and/or an increase of fifty points is cause for concern about high concentration. Although there is no HHI for the nation as a whole, forty-six out of eighty-

six metropolitan statistical areas had actual HHI's over 1800 in 1998. Only thirty-eight out of ninety-three MSA's had an actual HHI of over eighteen hundred in 1992. Clearly there are some metropolitan areas that have a high concentration of retail grocery store ownership. I would like to see more analysis based on this measure.

Even if there is concentration in ownership across the nation, does it mean consumers are disadvantaged by higher prices or lower service? These studies do not address this issue directly, but talk about the motivation for consolidation. The primary motive is to gain buying power in order to bargain with suppliers and obtain lower costs of goods sold. The economies of scale that the recent mergers allow enable the larger retailers to adopt electronic business-to-business commerce technologies and therefore, better manage their supply chain. That is, they can drive down their costs and (theoretically) consumer prices. The real driving forces behind these recent mergers and acquisitions is to be able to compete with Wal-Mart on price and efficiency and to try and recapture a declining share of the American consumer's food dollar that is going to fast food places and restaurants. As long as this is the motivation, one should not see consumer food prices rising as a result of consolidation.

There have been several monopoly pricing studies over the years that tend to show that food prices are higher in cities where retail is more concentrated and some studies that show the opposite (Kinsey, 1998). When worrying about monopoly one needs to consider all of the types of competition for the retail food customer. The competition faced by food stores is not only from other grocery stores, but from local restaurants, fast food places, school and work place cafeterias and a variety of other places where consumers can purchase food. And, as Kaufman says, changes in lifestyles and

cooking habits have diminished the share of food dollar spent in retail stores, regardless of who owns them.

One of the very appropriate points made in this paper is that national concentration ratios are not very meaningful for retail food stores since they are scattered widely across the country. Each store competes in a radius of about 5 miles. Parent company ownership will likely affect the employees and the local wholesalers more than the consumers. In fact, disintermediation of wholesalers is a major phenomena in this latest round of mergers. The largest chains are all self-distributing, using their own distribution centers rather than third party wholesalers. This allows them to aggregate orders and increases their bargaining power with food manufacturers. Monopsony power by the top five retail food chains is not outside the realm of possibility.

The paper by Simpson and Hosken looks at investors reaction to announced mergers or acquisitions as measured by the change in the price of the stock of rival firms. They found very small changes in the stock prices, up or down, and conclude that the mergers were not perceived to be anticompetitive. Their six merger and acquisition events occurred between 1984 and 1995 and therefore do not include the most recent mega mergers or the rapid growth of Wal-Mart in the food business. They argue that this is good because it predates a shift in FTC enforcement of anti-trust law and thus, allows a truer read on investors expectations. If it is true that investors have better information about the competitive nature of a market than the average consumer, and will express their expectations quickly in the stock market, this may be a good way to judge the future effect of market consolidation.

The tests they conduct do not provide definitive statistical results. But, to their credit, they have presented a thorough analysis of the data and the findings and have interpreted what it means

for future food prices. By tying the statistical findings to a change in retail price at the upper and lower boundaries of abnormal stock price returns, they find permanent changes in retail food prices of between 0.1 and 0.05 percent. This strengthens their conclusion about the lack of an anticompetitive nature to the mergers; they are unlikely to change food prices any more than would be normal in the markets where they operate.

The change in the HHI index is included as part of the information about the six events studied by Simpson and Hosken. They show that the change in the HHI and the final HHI after the six events as they affected fifteen markets. By my calculation the average HHI increased 346 points or twenty percent with a range of 8.9 to 44.6 percent. The post merger HHIs were all over eighteen hundred with one exception. Even if investors exhibited no major concern, the change in the HHI indicates potentially high concentration.

On April 15, 2000, Supermarket Business published a list of “America’s 50 Largest Supermarket Chains” and suggested we are in a pause in a whirlwind of consolidation over the past few years. The number one chain has 2,260 more stores than chain number fifty and had \$41.46 billion more in sales in 1999. But examining all the chain names, regions where they operate, and diversity in size and number of own distribution centers, (only 3 use a third part wholesaler), it reminds us that there is still a lot of diversity in this industry. Urbanski (2000) points out that while the top three chains in retail food account for about twenty-five percent of the industry, in discount retail stores the top three chains account for seventy-five percent of sales and in drug store chains the top three account for forty-five percent of sales. Retail food stores are relatively unconsolidated and will probably remain that way, partly because food stores must exist in virtually every community, under some name. They cannot be consolidated in 5 cities or one region and therefore, there will

always be room for niche players, innovative merchandisers, and retailers that cater to local tastes and preferences. The large chains are reorganizing to compete with Wal-Mart on efficiency and price. This should be good for consumers who care about food prices. For those who are not particularly price conscious, and those who are more concerned about food quality or alternative food production and processing methods, there will be stores that cater to their needs. Retail food consolidation bears watching, but, as yet, it does not bear worrying, according to the papers in this session.

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Table 1

Top 4/5 Retail Food Chains, U.S.

1930	1990	1999
1. A&P	1. Kroger	1. Kroger
2. American	2. American Stores	2. Wal-Mart*
3. Kroger	3. Safeway	3. Albertson's
4. Safeway	4. Winn-Dixie	4. Safeway
5. National Tea		
% of Total Sales:		
17	16	34

Sources: Mayo, Food Institute Reports- 1999

*Wal-Mart is all Supercenter Sales

Table 2

Top 4/5 Supermarket Chains: 1999

Chain	No. Stores	Annual Sales (bil.)
1. Kroger	2,328	\$42.2
2. Albertson's	1,703	\$31.0
3. Safeway	1,445	\$28.1
4. Ahold, USA	946	\$19.4
5. Wal-Mart (grocery products only)	721	\$15.6 \$30.0 with Sams Clubs

CR4 = 29.7 CR5 = 33.6 based on total sales of \$405 billion

Source: Urbanski, 2000 (*Supermarket Business*)

Table 3

**Summary of Change in Concentration Ratios for
Retail Food Stores, 1992-1998/99.**

Study	Percentage Points Change
CR4 ratio after M&A: Kaufman	3.3
CR4 ratio after M&A adjusted for population: Kaufman	4.4
CR4 ration in 54 MSAs after Wal- Mart entered: Franklin	3.5